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Application Serial No. 10/581,953 Reply to Office Action of March 15, 2011

PATENT Docket: CU-4850

## REMARKS

In the Office Action, dated March 15, 2011, the Examiner states that Claims 13-22 are pending and rejected. By the present Amendment, Applicant amends the claims.

## Rejections under 35 U.S.C. §112

Claims 13-22 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicant respectfully disagrees with and traverses these rejections.

At the outset, Applicant notes that the scope of the ionizing radiation curing resin recited in Claim 13 has been further defined such that "a chain number n of an ethylene oxide repeated unit in an ethylene oxide modified portion of the ethylene oxide modified polymerizable compound is within the range of 2 to 20." Support for this amendment can be found on page 22, line 27 to page 23, line 19 of the specification. Also, the phrase "the surface layer side" of Claim 13 has been amended to read "contacting to the surface layer."

In Claim 16, the term "the surface layer paper" has been amended to read "the surface layer-paper." Also, Claim 16 has been amended to clarify that the blocking layer comprises one independent blocking layer and one impregnated blocking layer.

Applicant respectfully asserts that by the foregoing amendments, the rejection with respect to line 4 of Claim 13 has been overcome.

With respect to the rejection of lines 11 and 14 in Claim 13, Applicant notes that the presently claimed invention is characterized in that the surface layer-side impregnated paper layer of the surface layer and the base material layer-side impregnated paper layer of the base material layer contain the same thermosetting resin. Thus, all the thermosetting resin recited in the present invention indicates the same thing and this is sufficiently clear from the specification.

With respect to the rejection of line 3 in Claim 16, Applicant notes that Claim 16 is a dependant claim of Claim 13 and the antecedent basis of "the surface layer-paper" is found in line 10 of Claim 13.

Regarding "the surface layer paper," the above-mentioned correction to "the surface layer-paper" will allow us to overcome the rejection. The "surface layer-side impregnated paper" indicates the part of the "surface layer-paper" impregnated with the thermosetting resin, as described in Claim 13. Thus, Applicant respectfully

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asserts that it is apparent that the "surface layer-side impregnated paper" and the "surface layer-paper" are not completely the same thing.

Finally, Applicant respectfully asserts that the amendment to Claim 17 will allow it to overcome the rejection in connection with this claim.

Rejections under 35 U.S.C. §103(a)

Claims 13-18 and 20-21 are rejected under 35 U.S.C. §103(a) as being unpatentable over US 6,514,624 (Takemoto) in view of US 6,641,926 (Malina). Claims 19 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Takemoto in view of Malina and US 4,339,566 (Rosenkranz). Applicant respectfully disagrees with and traverses these rejections.

The ionizing radiation curing resin, constituting the surface resin layer in the decorative material of the presently claimed invention, comprises "ethylene oxide modified polymerizable compound and ethylene oxide non modified acrylate monomer by mass ratio of 30:70 to 50:50" and "a chain number n of an ethylene oxide repeated unit in an ethylene oxide modified portion of the ethylene oxide modified polymerizable compound is within the range of 2 to 20."

However, neither one of Takemoto or Malina teach or suggest a decorative material which comprises a surface resin layer made of a cured material of such ionizing radiation curing resin.

Specifically, Takemoto discloses trimethylolpropane ethylene oxide tri(meth)acrylate as a monomer which may be contained as a component in the ionizing radiation curing resin which constitutes the surface resin layer (column 4, line 55). Nonetheless, Takemoto does not teach or suggest to use such ethylene oxide modified polymerizable compound together with an ethylene oxide non modified acrylate monomer.

Even further, it is apparent that Takemoto is completely silent about containing an ethylene oxide modified polymerizable compound and an ethylene oxide non modified acrylate monomer by mass ratio of 3/7 to 5/5. Further, it is also apparent that Takemoto is completely silent about a chain number n of an ethylene oxide repeated unit in an ethylene oxide modified portion of the ethylene oxide modified polymerizable compound is within the range of 2 to 20.

Moreover, the present application discloses that the pollution resistance is decreased by containing the ethylene oxide modified polymerizable compound with

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high hydrophilic property (page 23, lines 8 to 12).

Whereas in Takemoto, it is disclosed that the surface resin layer requires stain resistance ("BACKGROUND OF THE INVENITON" of Takemoto). In addition, unlike the presently claimed invention, Takemoto does not discuss about objects such as employing a method of impregnating an uncured thermosetting resin or improving the blocking properties of the surface resin layer to the uncured material of the thermosetting resin, at the time of forming a decorative sheet.

In view of this, Applicant respectfully asserts that it is obvious for the skilled person, who becomes aware of Takemoto, which does not mention at all about an object of the present invention to improve the blocking properties to the uncured material of the thermosetting resin (page 21, lines 14 to 18), to avoid as much as possible to contain an ethylene oxide modified polymerizable compound having high hydrophilic property when the skilled person considers to improve the protection properties as well as the stain resistance of the surface resin layer of Takemoto.

In other words, containing the ethylene oxide modified polymerizable compound and the non modified acrylate monomer by the above-mentioned range is not required unless one faces an object of the present invention to improve the blocking properties to the uncured material of the thermosetting resin.

Accordingly, Applicant respectfully asserts that it is apparent that the skilled person would not easily arrive over Takemoto to intentionally select an ethylene oxide modified polymerizable compound having high hydrophilic property to use together with a non modified acrylate monomer and to set the monomer ratio of that time to the above-mentioned range.

Further, in Takemoto, the monomer of the ionizing radiation curing resin is assumed to require low hydrophilic property. Even if the ionizing radiation curing resin contains an ethylene oxide modified polymerizable compound such as trimethylolpropane ethylene oxide tri(meth)acrylate, the skilled person would not easily attain to set a chain number n of an ethylene oxide repeated unit in an ethylene oxide modified portion of the ethylene oxide modified polymerizable compound to be bigger than 1.

Regardless, To support a *prima facie* case of obviousness, the Office Action must establish "a finding that the prior art included each element claimed, although not necessarily in a single prior art reference, with the only difference between the

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claimed invention and the prior art being the lack of actual combination of the elements in a single prior art reference." Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in view of KSR International Co. v. Teleflex Inc., 72 Fed. Reg. 57,526 (Oct. 10, 2007). Since the prior art does not teach or suggest each and every feature of the presently claimed invention, Applicant respectfully asserts that a *prima facie* case of obviousness cannot presently be established.

Since independent Claim 13 is allowable over the prior art, Applicant asserts that all claims depending therefrom are allowable for at least the same reasons, as well as for the features that they recite. As such, Applicant respectfully requests withdrawal of the present rejections under 35 U.S.C. §103(a).

In light of the foregoing response, all the outstanding objections and rejections are considered overcome. Applicant respectfully submits that this application should now be in condition for allowance and respectfully requests favorable consideration.

Respectfully submitted,

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